

FIG. 1

REPLACEMENT SHEET

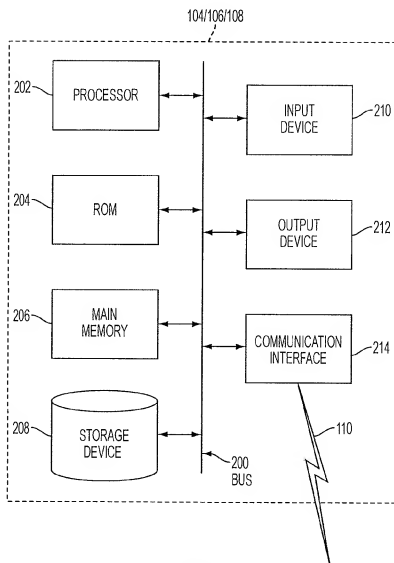


FIG. 2

# REPLACEMENT SHEET

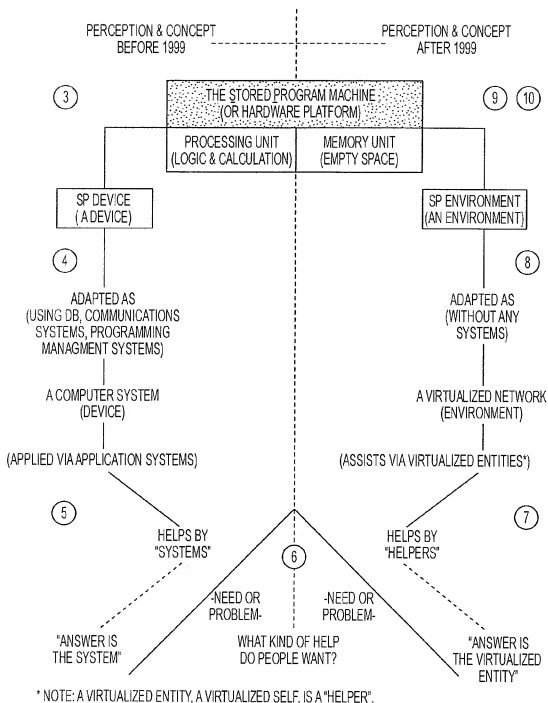
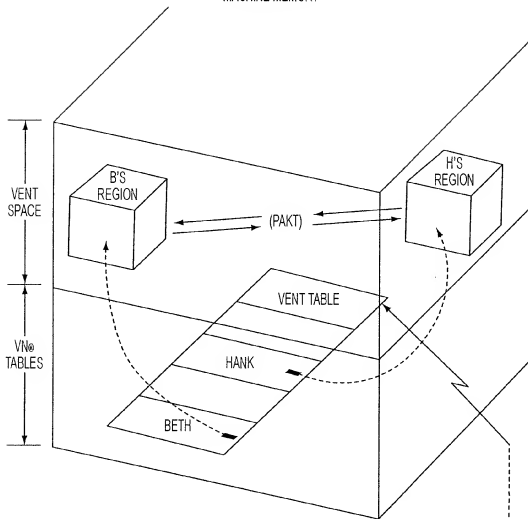


FIG. 2-1

# REPLACEMENT SHEET

VIRTUAL SPACE = STORED PROGRAM  
MACHINE MEMORY



- MEMORY OF THE STORED PROGRAM MACHINE CONTAINS TABLES USED BY THE VN® ADAPTATION, AND SEPARATELY, PROVIDES THE SPACE FOR VIRTUALIZED ENTITIES.
- THERE IS 1 VENT TABLE PER MACHINE CONTAINING 1 RECORD FOR EACH VENT KNOWN TO THAT MACHINE. THE RECORD FOR EACH VENT NAME, CONTAINS A POINTER TO ITS LOCATION IN VIRTUAL SPACE AND OTHER ENTITY INFORMATION.
- "SPEAK" MOVES A PAKT (=DATA+ACTION) FROM THE "SPEAKER" VENT. TO THE "LISTENER" VENT.

FIG. 3-1

# REPLACEMENT SHEET

HARDWARE CONFIGURATION: ILLUSTRATION FOR THE BANK'S SP MACHINE

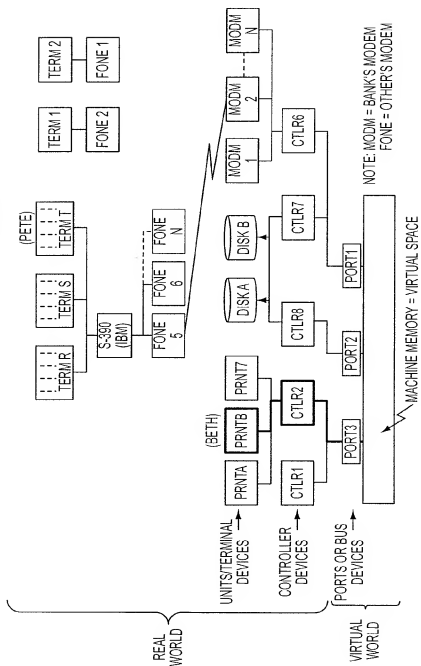


FIG. 3-4

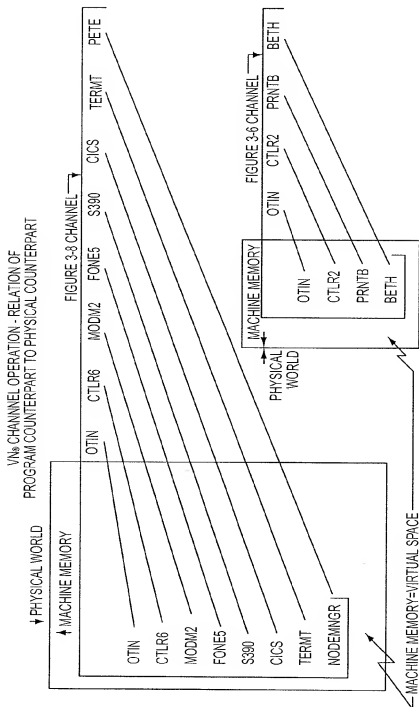
# REPLACEMENT SHEET

ILLUSTRATION FOR VENT TABLE ON BANK'S SP MACHINE

VENT NAME	PERSON/ DEVICE	CONNECT/ NOT CON	ON/ OFF	SPLN SPACE	DEFAULT SPLN	VSPACE ADDRESS
OTIN				MEMORY		
PORT 1		C		OTIN		
PORT 3		C		OTIN		
CTLR 1		C		PORT 3		
CTLR 2		C		PORT 3		
CTLR 6		C		PORT 1		
BETH	P				PRINT B	
MODM 1				CTLR 6		
S390				PHONE 56,N		
PHONE 5				MODM		
PHONE 6				MODM		
PRINT B		C		CTLR 2		
MODM 2		C		CTLR 6		
TERM 1				PHONE 1		
CICS				S390		
TERM R				CICS		
TERM T				CICS		
DRIL 7		C		CTLR 2		
HANK	P					
NODENMGR	P			PORT 1		
CTLR 7		C		CTLR 7		
DISK B		C		TERM T		
PETE	P			MODM		
PHONE 1						

WHEN A CONNECTED DEVICE IS ON, IT IS BUSY/USED. WHEN A PUBLIC DEVICE IS ON, IT ANSWERS "AVAILABLE" TO BE USED.

FIG. 3-5



• AN ENTITY'S VIRTUALIZED (PROGRAM) COUNTERPART IN MACHINE MEMORY CORRESPONDS TO ITS PHYSICAL COUNTERPART IN PHYSICAL SPACE. THE INTERACTION BETWEEN SUCH CORRESPONDING VIRTUAL AND PHYSICAL COUNTERPARTS IS THE ONLY TYPE OF VIRTUAL- PHYSICAL INTERACTION ALLOWED.

FIG. 3-6,3-8

# REPLACEMENT SHEET

THESE ARE PKT'S (THE DATA AND ACTION) PASSING BETWEEN THE  
VIRTUAL AND PHYSICAL WORLDS @ OTIN ENTITY

ORIGINAL SPEAKING PROGRAM	VIRTUAL COMPONENT SPEAKS	DIRECTION OF BIT STRING MOVEMENT	PHYSICAL COMPONENT SPEAKS
OTIN OTIN	SELECT PORT 3	↔	PORT 3 SELECTED
CTLR CTLR	RESET	↔	RESET OK
CTLR CTLR	SEL LINE # (PRINT B)	↔	LINE # SELECTED
PRNT B PRNT B	SKIP NEW PAGE	↔	NEW PAGE OK
BETH BETH	BETH/ HOW??/HANK	↔	LINE PRINTED OK

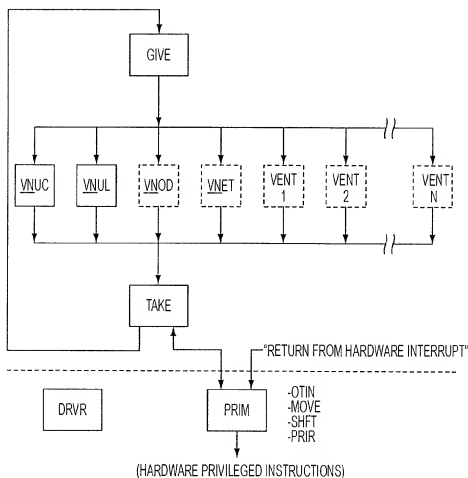
AT THIS POINT BETH MAY CONTINUE TO SPEAK PKT'S TO HER 'SPEAK-LISTEN SPACE', I.E. PRINT B.

FIG. 3-7



# REPLACEMENT SHEET

## CHART OF LOGIC MODULES FOR VN<sub>0</sub>



• ADAPTATION LOGIC IN SOLID LINES, VENTS IN BROKEN LINES.

• 4 "VN" VENTS ARE INCLUDED WITH VN<sub>0</sub>; ALL ARE NECESSARY TO ITS OPERATION. EXCEPTING VNUC AND VNUL, EACH MAY BE FURTHER CUSTOMIZED OR ENHANCED BY USERS. ACTUALLY VNUC AND VNUL ARE NOT VENTS BUT EACH USES THE "SPEAK-LISTEN" POWER TO ACCOMPLISH ITS FUNCTION.

• THE GIVE-TAKE CYCLE IS EXECUTED AT LEAST ONCE FOR EVERY VENT "SPEAK".

• VNUC AND VNUL ARE NOT TRUE VENTS BUT ARE PLACED HERE, IN THE LOGIC, IN ORDER TO HAVE ALL VENT "SPEAK-LISTEN" POWER AVAILABLE TO THEM.

FIG. 3-9

# REPLACEMENT SHEET

AID FOR DELEGATING, DESIGNING) BEHAVIOR  
DRY/R EXECUTES THIS TABLE

ENTITY NAME ENGR \_\_\_\_\_  
TABLE NAME HELLO \_\_\_\_\_

CONDITION OR ACTION	NAME OF CONDITION, ACTION OR TABLE	1	2	3	4	5	6	ELSE
TELEPHONE OR TELEPRESENCE (NOT E-MAIL)	TEST 1	Y	Y	Y	Y	N	N	
MY MANAGER	TEST 2	Y	Y	-	-	-	-	
MEMBER OF ABCD CORP?	TEST 3	-	-	Y	N	N	Y	
AM I SIGNED-ON?	TEST 4	Y	N	Y	-	-	-	
"INTERRUPT MOMENTARILY URGENT CALL" (SPEAK)	ACTN 1	X						
CONNECT ME DIRECTLY TO MANAGER	ACTN2	X						
RING ME ON MY DIGITAL WIRELESS (SPEAK)	ACTN3		X					
SAY "PRESS 1 IF CORPORATE, 2 IF SALES..." (SPEAK)				X				
INSIDER ABCD CORP. (TABLE)	INSIDE MAIL					X		
OUTSIDER ON (TABLE)	OUTSIDE TALK			X				
OUTSIDE MAIL	OUTSIDE MAIL				X			
SEND TO ENGR PERSON (SPEAK LARS)							X	
REPEAT THIS TABLE								
RETURN TO CALLING TABLE								

FIG. 3-10a

# REPLACEMENT SHEET

ENTITY NAME ENGR TABLE NAME INSIDE MAIL		AID FOR (DELEGATING, DESIGNING) BEHAVIOR						
CONDITION OR ACTION	NAME OF CONDITION, ACTION OR TABLE	1	2	3	4	5	6	ELSE
FROM MGR?		Y	Y	N				
ORDER FORMAT?		Y	Y					
ALL STOCK PART #S?		Y	N					
ATTACH FABRICATION SPECS FOR EACH PART		X						
FORWARD ORDER TO MGR (SPEAK)		X						
DISPLAY ORDER FOR ENGINEERING DESIGN (SPEAK)			X					
DO ENGINEERING DESIGN AID (TABLE)			X					
SEND TO ENGR PERSON (SPEAK LARS)								X
REPEAT THIS TABLE			X					
RETURN TO CALLING TABLE								

FIG. 3-10b

# REPLACEMENT SHEET

AID FOR BEHAVIOR ENGR

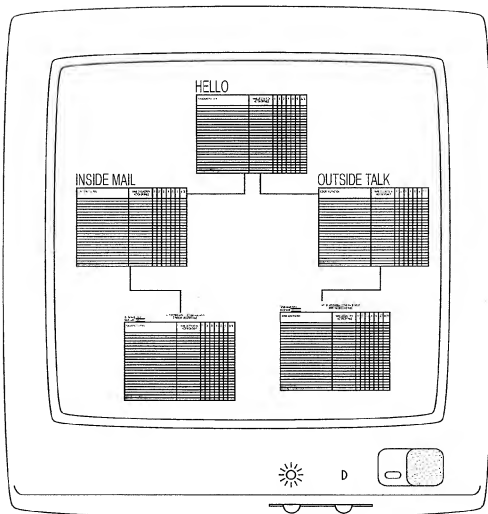


FIG. 3-10c

NATURAL ENTITIES  $\longrightarrow$   $|$   $\longleftarrow$  CONSTRUCTED ENTITIES  $\longrightarrow$

NOTE: HATCH MARKS MEAN ENTITY DOES NOT EXIST AT HATCHED LEVEL.

FIG. 4-1 &amp; 5-1

# REPLACEMENT SHEET

ENTITIES MOST FREQUENTLY VISUALIZED (ALMOST ANY ENTITY COULD BE VISUALIZED)

ENTITY	NATURAL OR CONSTRUCTED	COMMON NAME	EXAMPLE	EXIST AT LEVEL?	
				CONSCIOUS	SUBCONSCIOUS   PHYSICAL
PHYSICAL PERSON	N	HUMAN	BETH HANK YOU	YES	YES
CONCEPTUAL PERSON	C	RESPONSIBILITY	TELLER MANAGER ABC CORP LIBRARIAN	NO	YES
PHYSICAL DEVICE	C	IMPLEMENT	FORK PUMP MODEM	NO	YES
CONCEPTUAL DEVICE	C	ALGORITHM	TAX CALCULATION PAYROLL LINEAR PROGRAM	NO	YES

PERSONS OF BOTH TYPES ARE AUTONOMOUS WITH UNSOLICITED PROGRAM COUNTERPARTS. PERSONS HAVE MULTIPLE CONTEXTS, AUTOMATICALLY RECOGNIZE THE CONTEXT AND ALL DATA/INFORMATION BELONGS TO THEM.

DEVICES OF BOTH TYPES ARE NOT AUTONOMOUS WITH SOLICITED PROGRAM COUNTERPARTS. DEVICES HAVE A SINGLE CONTEXT AND NO DATA/INFORMATION BELONGS TO THEM. ( NORMALLY DEVICE PROGRAM COUNTERPARTS INVOLVE NO PROCEDURAL PORTIONS, ONLY CONSTANTS, A KIND OF 'SLIDE-IN TRAY OF CONSTANTS'.)

FIG. 4-2

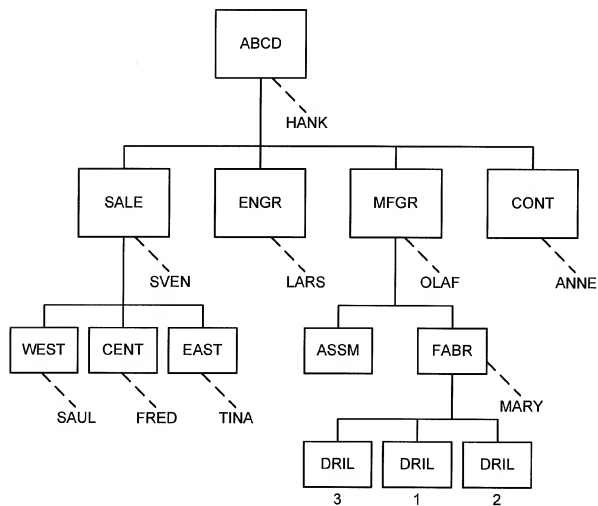
# REPLACEMENT SHEET

ANALOGOUS DESIGN PRINCIPLES FOR ALL CONSTRUCTED ENTITIES

DESIGN PRINCIPLE	RESPONSIBILITY= CONCEPTUAL PERSON	ALGORITHM= CONCEPTUAL DEVICE	IMPLEMENT= PHYSICAL DEVICE
THE CONSTRUCTED ENTITY HAS:	EXAMPLE: ANY STATE IN THE USA	EXAMPLE: TAX CALCULATION	EXAMPLE: TEMPERATURE SENSOR (OR TRANSDUCER)
1 A FUNCTION OR PURPOSE	TO GOVERN OR CONTROL THE HUMAN POPULATION WITHIN ITS BOUNDS	TO ASSIST CALCULATION OF TAXABLE AMOUNT	TO CAUSE A HEATER SUB-ASSEMBLY TO IGNITE A VARIABLE RATE HEATER WHEN SENSED TEMPERATURE IS LESS THAN SET TEMPERATURE
2 A LIMITED OR BOUNDED AREA OF OPERATION OR AUTHORITY	JURISDICTION LIMITED BY ADJACENT STATES AND BY AREAS AND POWERS RESERVED BY THE FEDERAL GOVERNMENT.	LIMITED TO AMERICAN CITIZEN, NO CAPITAL GAINS AND < 9 DEPENDENTS	WITHIN TEMPERATURE LIMITS OF 20° < 220°C; (INPUT ~ 12V&1m amp)
3 THE CAPABILITY, POWER OR AUTHORITY TO ACCOMPLISH ITS FUNCTION	WITHIN ABOVE LIMITS POWER TO ENACT AND ENFORCE ORDINANCES	WITHIN ABOVE LIMITS ABLE TO CALCULATE TAXABLE AMOUNT	WITHIN ABOVE LIMITS DEVICE OUTPUT ~0.1m amp FOR EACH DEGREE SET TEMPERATURE EXCEEDS SENSED TEMPERATURE.

FIG. 5-2

REPLACEMENT SHEET



**FIG. 5-3**